

Amendments to the Claims:

Claim 1 (Original): A pharmaceutical composition for the treatment of an inflammatory disease comprising:

a water-soluble polymer and an effective amount of an anti-inflammatory therapeutic agent linked to said water-soluble polymer, wherein the water-soluble polymer specifically accumulates in sites of inflammation.

Claim 2 (Original): The pharmaceutical composition of claim 1, further comprising a targeting moiety linked to the water-soluble polymer.

Claim 3 (Cancelled)

Claim 4 (Previously Presented): The pharmaceutical composition of claim 1, wherein the water-soluble polymer is selected from the group consisting of a HPMA copolymer, polyethylene glycol, polyglutamic acid, polyaspartic acid, dextran, chitosan, cellulose, starch, gelatin, hyaluronic acid and derivatives thereof.

Claim 5 (Previously Presented): The pharmaceutical composition of claim 1, further comprising a bio-assay label linked to the water-soluble polymer.

Claim 6 (Previously Presented): The pharmaceutical composition of claim 1, further comprising a spacer between the therapeutic agent and the water-soluble polymer, wherein the spacer is cleavable.

Claim 7 (Previously Presented): The pharmaceutical composition of claim 1, further comprising a spacer between the therapeutic agent and the water-soluble polymer, wherein the spacer is uncleavable.

Claim 8 (Original): The pharmaceutical composition of claim 1, wherein the anti-inflammatory therapeutic agent is a glucocorticoid.

Claim 9 (Original): The pharmaceutical composition of claim 2, wherein the targeting moiety directs the composition to bone or cartilage.

Claim 10 (Previously Presented): The pharmaceutical composition of claim 2, wherein the targeting moiety is selected from the group consisting of bisphosphonates, quaternary ammonium groups, peptides, oligo-Asp, oligo-Glu, aminosalicyclic acid, antibodies and fragments or derivatives thereof.

Claim 11 (Previously Presented): The pharmaceutical composition of claim 2, wherein the link between the targeting moiety and the water-soluble polymer is cleavable.

Claim 12 (Previously Presented): The pharmaceutical composition of claim 2, wherein the link between the targeting moiety and the water-soluble polymer is uncleavable.

Claim 13 (Previously Presented): The pharmaceutical composition of claim 1, wherein the water-soluble polymer comprises N-(2-hydroxypropyl)methacrylamide.

Claim 14 (Currently Amended): The pharmaceutical composition of claim 1, wherein the water-soluble polymer comprises one or more monomers selected from the group consisting of of ~~ef~~, N-(2-hydroxypropyl)methacrylamide, N-isopropyl-acrylamide, acrylamide, N,N-dimethylacrylamide, N-vinylpyrrolidone, vinyl acetate, 2-methacryloxyethyl glucoside, acrylic acid, methacrylic, vinyl phosphonic acid, styrene sulfonic acid, maleic acid, 2-methacryloxyethyltrimethylammonium chloride, methacrylamidopropyltrimethylammonium chloride,

methacryloylcholine methyl sulfate, N-methylolacrylamide, 2-hydroxy-3-methacryloxypropyltrimethyl ammonium chloride, 2-methacryloxyethyltrimethylammonium bromide, 2-vinyl-1-methylpyridinium bromide, 4-vinyl-1-methylpyridinium bromide, ethyleneimine, (N-acetyl) ethyleneimine, (N-hydroxyethyl) ethyleneimine, allylamine and combinations thereof.

Claim 15 (Previously Presented): The pharmaceutical composition of claim 1, wherein the therapeutic agent is selected from the group consisting of proteins, peptides, NSAIDs, DMARDs, glucocorticoids, methotrexate, sulfasalazine, chloriquine, gold, gold salt, copper, copper salt, penicillamine, D-penicillamine, cyclosporine, and mixtures thereof.

Claim 16 (Withdrawn): A method for the treatment of an inflammatory disease comprising:

administering the pharmaceutical composition of claim 1 to a subject thought to have an inflammatory disease; and
accumulating the pharmaceutical composition in inflamed tissue of the subject by the affinity of the water-soluble polymer for the inflamed tissue.

Claim 17 (Withdrawn): The method according to claim 16, further comprising targeting the water-soluble polymer to a specific tissue.

Claim 18 (Withdrawn): The method according to claim 16, wherein the inflammatory disease comprises rheumatoid arthritis.

Claim 19 (Cancelled)

Claim 20 (Withdrawn): The method according to claim 16, further comprising conducting a biodistribution assay wherein the composition is labeled.

Claim 21 (Withdrawn): The method according to claim 16, further comprising cleaving the link between the therapeutic agent and the water-soluble polymer.

Claim 22 (Withdrawn): The method according to claim 17, wherein targeting the water-soluble polymer to a specific tissue comprises targeting bone or cartilage.

Claim 23 (Withdrawn): The method according to claim 17, wherein targeting the water-soluble polymer to a specific tissue comprises using a targeting moiety selected from the group consisting of bisphosphonates, quaternary ammonium groups, peptides, oligo-Asp, oligo-Glu, aminosalicyclic acid, antibodies and fragments or derivatives thereof.

Claim 24 (Withdrawn): The method according to claim 17, further comprising cleaving a link between the targeting moiety and the water-soluble polymer.

Claim 25 (Withdrawn): A method of administering an aqueous composition to a subject, said method comprising:

administering the pharmaceutical composition of claim 1 in an aqueous solvent or diluent to a subject thought to have rheumatoid arthritis; and

allowing accumulation and targeting of the pharmaceutical composition in an arthritic joint, thereby improving a treatment of arthritis.

Claim 26 (Withdrawn): The method according to claim 25, further comprising reducing a side effect of the therapeutic agent in tissues other than the arthritic joint.

Claim 27 (Withdrawn): The method according to claim 25, wherein the therapeutic agent is selected from the group consisting of a NSAIDs, DMARDs, cyclooxygenase-2 inhibitor, a

glucocorticoid, a tumor necrosis factor blocker and an interleukin-1 receptor antagonist.

Claim 28 (Withdrawn): The method according to claim 25, wherein the water-soluble agent comprises a HPMA copolymer.

Claim 29 (Withdrawn): A composition for imaging and evaluating an inflammatory disease comprising:

a water-soluble polymer and an effective amount of a medical imaging agent linked to said water-soluble polymer, wherein the medical imaging agent is used in the imaging and evaluation of an inflammatory disease.

Claim 30 (Withdrawn): The composition of claim 29, further comprising a therapeutic agent linked to said water-soluble polymer.

Claim 31 (Withdrawn): The composition of claim 29, wherein the medical imaging agent is selected from the group consisting of at least one of a MRI, PET, CT and γ -scintigraphy agent.

Claim 32 (Withdrawn): The composition of claim 29, further comprising a targeting moiety linked to the water-soluble polymer.

Claim 33 (Cancelled)

Claim 34 (Withdrawn): The composition of claims 29, wherein the water-soluble polymer is selected from the group consisting of a HPMA copolymer, polyethylene glycol, polyglutamic acid, polyaspartic acid, dextran, chitosan, cellulose, starch, gelatin, hyaluronic acid and derivatives thereof.

Claim 35 (Withdrawn): The composition of claim 29, further comprising a bio-assay label linked to the water-soluble

polymer.

Claim 36 (Withdrawn): The composition of claim 29, further comprising a spacer between the imaging agent and the water-soluble polymer, wherein the spacer is cleavable.

Claim 37 (Withdrawn): The composition of claim 29, further comprising a spacer between the imaging agent and the water-soluble polymer, wherein the spacer is uncleavable.

Claim 38 (Withdrawn): The composition of claim 30, further comprising a spacer between the therapeutic agent and the water-soluble polymer, wherein the spacer is cleavable.

Claim 39 (Withdrawn): The composition of claim 30, further comprising a spacer between the therapeutic agent and the water-soluble polymer, wherein the spacer is uncleavable.

Claim 40 (Cancelled)

Claim 41 (Withdrawn): The composition of claim 32, wherein the targeting moiety directs the composition to bone or cartilage.

Claim 42 (Withdrawn): The composition of claim 40, wherein the targeting moiety is selected from the group consisting of bisphosphonates, quaternary ammonium groups, peptides, oligo-Asp, oligo-Glu, aminosalicyclic acid, antibodies and fragments or derivatives thereof.

Claim 43 (Cancelled)

Claim 44 (Withdrawn): The composition of claim 29, wherein the water-soluble polymer comprises N-(2-hydroxypropyl) methacrylamide.

Claim 45 (Withdrawn): The composition of claim 29, wherein the

water-soluble polymer comprises one or more monomers selected from the group consisting of N-(2-hydroxypropyl) methacrylamide, N-isopropylacrylamide, acrylamide, N,N-dimethylacrylamide, N-vinylpyrrolidone, vinyl acetate, 2-methacryloxyethyl glucoside, acrylic acid, methacrylic, vinyl phosphonic acid, styrene sulfonic acid, maleic acid, 2-methacrylloxyethyltrimethylammonium chloride, methacrylamidopropyltrimethylammonium chloride, methacryloylcholine methyl sulfate, N-methylolacrylamide, 2-hydroxy-3-methacryloxypropyltrimethyl ammonium chloride, 2-methacryloxyethyltrimethylammonium bromide, 2-vinyl-1-methylpyridinium bromide, 4-vinyl-1-methylpyridinium bromide, ethyleneimine, (N-acetyl)ethyl-eneimine, (N-hydroxyethyl)ethyleneimine, allylamine and combinations thereof.

Claim 46 (Withdrawn): The composition of claim 30, wherein the therapeutic agent is selected from the group consisting of proteins, peptides, NSAIDs, glucocorticoids, methotrexate, sulfasalazine, chloriquine, gold, gold salt, copper, copper salt, penicillamine, D-penicillamine, cyclosporine, and mixtures thereof.

Claim 47 (Withdrawn): A method for imaging and evaluation of an inflammatory disease, the method comprising:

administering the composition of claim 29 to the subject;
and

imaging an inflammatory disease patient or animal model before and after the administration of the imaging agent with MRI, PET, CT or γ -scintigraphy equipment.

Claim 48 (Cancelled)

Claim 49 (Withdrawn): The method according to claim 47, further comprising conducting a biodistribution assay.

Claim 50 (Withdrawn): The method according to claim 47, further comprising targeting the water-soluble polymer to a specific tissue.

Claim 51 (Withdrawn): The method according to claim 50, wherein targeting of the compound is directed to bone or cartilage.

Claim 52 (Withdrawn): The method according to claim 50, wherein targeting the compound to a specific tissue comprises using a targeting moiety selected from the group consisting of bisphosphonates, quaternary ammonium groups, peptides, oligo-Asp, oligo-Glu, aminosalicyclic acid, antibodies and fragments or derivatives thereof.

Claim 53 (Withdrawn): The method according to claim 50, further comprising cleaving a link between the targeting moiety and the water-soluble polymer.

Claim 54 (Withdrawn): The method according to claim 50, wherein imaging an inflammatory disease patient or animal model enhanced with the compound comprises imaging an arthritic joint.

Claim 55 (Cancelled)

Claim 56 (Cancelled)

Claim 57 (Original): The pharmaceutical composition of claim 1, wherein the therapeutic agent comprises a plurality of distinct therapeutic agents.

Claim 58 (Previously Presented): The pharmaceutical composition of claim 2, wherein the targeting moiety comprises a plurality of distinct targeting moieties.

Claim 59 (Original): The pharmaceutical composition of claim 58, wherein the plurality of distinct targeting moieties target a plurality of tissues.

Claim 60 (Original): The pharmaceutical composition of claim 5, wherein the bio-assay label comprises a plurality of distinct bio-assay labels.

Claim 61 (Previously Presented): The pharmaceutical composition of claim 6, wherein the spacer comprises a plurality of chemically distinct spacers.

Claim 62 (Withdrawn): The composition of claim 31, wherein the imaging agent comprises a plurality of distinct imaging agents.

Claim 63 (Withdrawn): The method according to claim 55, wherein the imaging agent comprises at least two imaging agents, wherein each of the two imaging agents is used in a different imaging technique.

Claim 64 (Withdrawn): A composition comprising a water-soluble N-(2-hydroxypropyl) methacrylamide copolymer linked to a targeting moiety and to a glucocorticoid via a pH sensitive hydrozone bond.

Claim 65 (Withdrawn): The composition of claim 64, wherein the glucocorticoid is dexamethasone.

Claim 66 (Withdrawn): The composition of claim 64, wherein the targeting moiety is hydrazine.

Claim 67 (New): The pharmaceutical composition of claim 6, wherein the cleavable spacer comprises a hydrazone.